

EXHIBIT 16

I, Michael L. Younger, declare as follows:

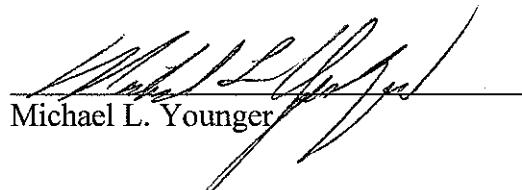
1. My professional address is 720 Northstar Center West, 625 Marquette Avenue South, Minneapolis, MN 55402. I am the Director of Digital Forensics for Stroz Friedberg's Minneapolis office, and serve as the Senior Director for the entire firm. I joined Stroz Friedberg after retiring as a Special Agent with the Air Force Office of Special Investigations (AFOSI) where I most recently served in the Cyber Division at FBI headquarters in Washington, DC and coordinated and analyzed all national-level computer crime investigations affecting the Department of Defense and other federal agencies. I also served as a Supervisory Special Agent Program Manager for the FBI's Counterterrorism, Counterintelligence, Computer Intrusion Unit. I have extensive training in the use of computer forensic tools and techniques including EnCase, EnCase Enterprise, Access Data's Forensics Toolkit, ILook, Paraben, and dtSearch, and have presented oral or written testimony as a computer forensic expert on numerous occasions. I have been involved with at least 12 cases that required me to trace the electronic origins of data. My qualifications are set forth in greater detail in the first seven pages of Exhibit A attached hereto.

2. I have personal knowledge of the matters stated in this declaration. I am over the age of 18, under no disability, and, if called as a witness, could and would testify competently to the matters contained in this declaration. I have been retained as an expert by Chevron Corporation ("Chevron") to provide expert opinions in the case of *Chevron Corporation v. Steven Donziger et al.*, Case No. 11 Civ. 0691 (LAK) (SDNY). In connection with that retention, I have prepared the report attached to this declaration as Exhibit A.

3. Attached hereto as Exhibit A is a true and correct copy of the report, dated June 10, 2011, entitled Expert Report of Michael L. Younger. I have formed the opinions in Exhibit

A to a reasonable degree of scientific certainty, and if called as a witnesses, could and would testify to the same.

4. I declare under penalty of perjury under the laws of the United States of America and under the laws of the States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming, and under the laws of the District of Columbia, and under the laws of any other applicable jurisdiction, that the foregoing is true and correct, and that this Declaration was executed on July 14, 2011 in Minneapolis, Minnesota.



Michael L. Younger

EXHIBIT A

CHEVRON CORP. V.
STEVEN DONZIGER ET AL.,
No. 11-cv-03718-UA (S.D.N.Y)

EXPERT REPORT
OF
MICHAEL L. YOUNGER

JUNE 10, 2011

STROZ FRIEDBERG

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1. BACKGROUND

1.1. CASE BACKGROUND

Stroz Friedberg was retained by Gibson, Dunn & Crutcher LLP, counsel for Chevron (“counsel”), to review data described below. Stroz Friedberg is a global digital risk management and investigations firm that specializes in digital forensics, data breach and cybercrime response, electronic discovery, and business intelligence and investigations. Stroz Friedberg has eleven offices across the United States and the United Kingdom.

1.1.1 EXPERTISE OF MICHAEL L. YOUNGER

I am the Director of Digital Forensics for the firm’s Minneapolis office and serve as the Senior Director for the entire firm. I personally performed, supervised, or reviewed the forensic examinations by Stroz Friedberg described in this report. I have provided my opinions herein based on the facts I have learned and based upon my experience and training.

I joined Stroz Friedberg after retiring as a Special Agent with the Air Force Office of Special Investigations (AFOSI) where I most recently served in the Cyber Division at FBI headquarters in Washington, DC and coordinated and analyzed all national-level computer crime investigations affecting the Department of Defense and other federal agencies. I also served as a Supervisory Special Agent Program Manager for the FBI’s Counterterrorism, Counterintelligence, Computer Intrusion Unit. I have extensive training in the use of computer forensic tools and techniques including EnCase, EnCase Enterprise, Access Data’s Forensics Toolkit, ILook, Paraben, and dtSearch, and have presented oral or written testimony as a computer forensic expert on numerous occasions. I have been involved with at least 12 cases that required me to trace the electronic origins of data. My full CV, which includes a list of cases I have testified in since 2004, is included as Exhibit A.

Stroz Friedberg has charged for its services in this case on a time and materials basis and my rate is \$525 per hour. Neither the firm’s compensation nor mine depend upon the outcome of this matter.

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2. DATA AND MATERIAL REVIEWED

For this matter, I was asked to evaluate specific files provided through counsel to determine if I could attribute the data contained within specific reports or court filings to a common origin. In particular I was asked to determine if I could trace certain data contained within a document filed by Richard Cabrera, dated February 5, 2009, with the Lago Agrio Court ("the Cabrera February 2009 Filing"), as well as data in the Decision 2003-0002 of the Sucumbíos Provincial Court of Justice, dated February 14, 2011 (the "Sentencia"), to their likely origin. In doing so, I compared these court documents with data compilations, spreadsheets, and other files provided by counsel that I understand were obtained through discovery in the United States but were not filed in court in the Lago Agrio litigation in Ecuador.

I was provided with the following documents, select excerpts of which are included as Exhibit B:

- Adobe Acrobat file "Escrito R Cabrera 02-05-2009 - 09h10 - Surveys Documents.pdf," which is a document filed by Richard Cabrera in the Lago Agrio litigation in Ecuador (the "Cabrera February 2009 Filing").
- Adobe Acrobat file "2009.02.05 Cabrera's Response dated February 5 2009 at 9 10 am R 154171-154191 CERT Geotext.pdf," which I understand is an English translation of the Cabrera February 2009 Filing.
- Adobe Acrobat file "2008.04.01 Anexo B ENG&SP.pdf" which is titled "ANNEX B: EVALUATION OF THE USE OF DATA" and purportedly authored by Engineer Richard Cabrera ("Anexo B to the Cabrera Report").
- Adobe Acrobat file "Anexo H - Historia e inventario de las piscinas de desecho abiertas por la operacion de TEXPET en la amazonia Ecuatoriana.pdf" which contains an exhibit called "Anexo H-1, Inventario de Piscinas" filed with the Cabrera Report.
- Microsoft Access 2000 Database, "BaseDeDatos20Junio2007.mdb," internally identified as "Base de datos de SelvaViva del caso Aguinda v. ChevronTexaco en 20 Junio 2007 en forma INCOMPLETA" (hereafter "Selva Viva Database"). Through counsel, I understand the Selva Viva Database was produced by Laura Belanger, a consultant retained by the plaintiffs in the Lago Agrio matter.
- Adobe Acrobat file "Sentencia 1.pdf" which is the court's decision from the Lago Agrio litigation
- Adobe Acrobat file "LAGO AGRIO JUDGMENT (Cert Eng).pdf" which I understand is an English translation of the Sentencia.
- Three Microsoft Excel spreadsheet files: "DA00000040.xls," "DA00000041.xls," and "DA00000042.xls," which I understand were produced by Douglas Allen, an expert for the Lago Agrio Plaintiffs including Selva Viva (the "Unfiled Selva Viva Data Compilation"). It is also my understanding that these three XLS files, while produced in discovery in the United States to Chevron, were never filed with the court in the Lago Agrio litigation.
- One Microsoft Excel spreadsheet file: "STRATUS-NATIVE073597.xls" ("Stratus Compilation"), which I understand was produced by Stratus Consulting. It is also my understanding that this XLS file, while produced in discovery in the United States to Chevron, was never filed with the court in the Lago Agrio litigation. This XLS file is a compilation of pit information.
- Adobe Acrobat file "2010_08_05 Expt Rpt_Eng.pdf" which is a report titled "Expert Opinion of John A. Connor, P.E., P.G., E.C.E.E., Regarding Remediation Activities and Environmental Conditions in the Former Petroecuador-Texaco Concession, Oriente Region, Ecuador," ("The Connor Report") issued September 3, 2010.
- Adobe Acrobat file "SA-013_INFORME DE LA INSPECCION JUDICIAL DEL POZO SACHA 13_with signature.pdf" which I understand to be the Judicial Inspection of the Sacha 13 Well conducted by defendant's expert Doctor Gino Bianchi.

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- Adobe Acrobat file “SN053598 peers saying to add DRO GRO.pdf.” This file contains several email messages in a thread with the subject of “RE: QC for Ecuador report?” between various individuals that begins on December 22, 2008 at 12:55 PM and continues until January 26, 2009 at 9:39 AM.
- Adobe Acrobat file “sn61479 peers need to add dro gro for texco.pdf.” This file contains several email messages in a thread with the subject of “New Ecuador standards table” between various individuals that begins on March 04, 2008 at 1:37 PM and continues until approximately 1:20 PM that same day¹.
- Adobe Acrobat file “SN066426 email re gro dro.pdf.” This file contains several email messages in a thread with the subject of “follow up” between various individuals that begins on March 11, 2008 at 3:52 PM and continues until March 12, 2008 at 11:39 AM.
- Adobe Acrobat file “Tablas SA13 sampling results.pdf” which I understand to be sampling results from the Sacha 13 inspection completed by the defendant.
- Forty-seven Adobe Acrobat files, including 24 “Judicial Inspection Reports” and 23 “Filed Lab Results.” It is my understanding that these 47 documents were part of the official court record associated with the Lago Agrio litigation.
- Adobe Acrobat file “SN 049997-SN 050000.pdf”. This file contains an email thread with messages back and forth between individuals preparing a data compilation that begins on March 04, 2008 at 11:40 AM and continues until approximately 2:43 PM that same day².

These PDF files were represented to be parts of various court filings associated with litigation in Lago Agrio, Ecuador or documents produced by the Lago Agrio Plaintiffs' consultant. For purposes of my analysis, I have not conducted any independent environmental studies but have assumed that the lab results filed with the Judicial Inspection Reports in the Lago Agrio court (the “Filed Lab Results”) are accurate representations of the data collected during the various site inspections. I have made this assumption both because the Filed Lab Results were officially filed with the Lago Agrio court and because they appear to be copies of the original lab reports prepared for individual sites, not summaries or compilations of data. To the extent I have assumed other data may be erroneous, it is based on a comparison of that data to the Filed Lab Results.

¹ The email header at the top of the most recent message in this email thread reads “Tuesday March 4, 2008 1:20 PM” however, the flow of the email threads shows a consistent short gap between the parties’ replies to each other. Based on the last “embedded” email header showing a time of 2:18 PM, it appears that Mr. Hodgson’s computer is likely one hour off the server time reflected in previous messages in the email thread, thus making the last message time 1:20 PM. This type of one hour off-set is common if the clocks on the email server and a particular user’s computer are set to different time zones.

² The email header at the top of the most recent message in this email thread reads “Tuesday March 4, 2008 1:43 pm” however, the flow of the email threads shows a consistent short gap between the parties’ replies to each other. Based on the last “embedded” email header showing a time of 2:30 PM, it appears with Mr. Hodgson’s computer that is likely one hour off the server time reflected in previous messages in the email thread, thus making the last message time 2:43 PM.

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3. ANALYSIS

3.1. THE CABRERA FEBRUARY 2009 FILING

It is my understanding that the Cabrera February 2009 Filing is a document filed by Richard Cabrera purporting to respond to questions about his report filed in the Lago Agrio court. As part of my analysis of the origins of the data contained within the Cabrera February 2009 Filing, I reviewed the Selva Viva Database originally produced by the Lago Agrio Plaintiffs' consultant Laura Belanger in response to a subpoena authorized by the United States District Court for the District of Colorado. My analysis revealed that the "Objects" called Reports, Pages, Macros, and Modules were all blank, but there were fourteen (14) Tables and fourteen (14) Queries as shown below in Figures 1 and 2. There was only one Form and it consisted of a "Menu" that described the contents of the Tables and Queries. See Figure 3.

Figure 1 - Selva Viva Database Tables



The screenshot shows the Microsoft Access 2000 interface with the title bar "BaseDeDatos 20 Junio 2007 : Database (Access 2000 file format)". The left pane displays a tree view of objects: Tables, Queries, Forms, Reports, Pages, Macros, and Modules. The "Tables" node is selected. The main pane lists 14 tables with their descriptions:

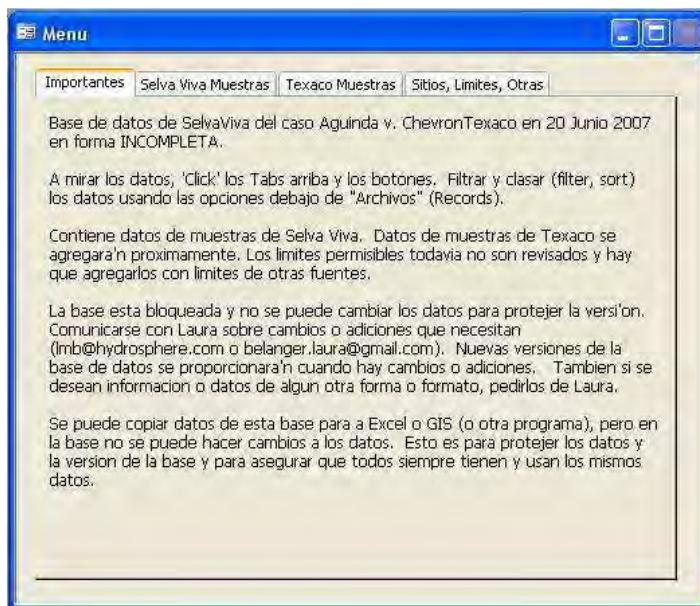
Name	Description
Sitios	1a. Lista de pozos y estaciones, con detalles.
Muestras	1b. SelvaViva muestras. Descripciones, coordenadas, mas.
Muestras_SinResultados	1c. SelvaViva muestras que no tienen resultados químicos.
ResultadosQuimicos	2a. Resultados químicos por muestra y parámetro.
Resultados_Aguas	2b. SelvaViva resultados aguas.
Resultados_Crudos	2c. SelvaViva resultados crudos.
Resultados_Suelos	2d. SelvaViva resultados suelos.
LimitsPermisiblesAqua	3a. Table de límites permisibles de agua.
LimitsPermisiblesSuelo	3b. Tabla de límites permisibles de suelo.
Texturas	4a. Definiciones de texturas litológicas.
Definiciones_Flags	4b. Definiciones de "Flags" en los resultados.
Texaco_Coordinates	5. DRAFT. Coordenadas de muestras de Texaco.
InformacionDeFamilias	6. DRAFT. Necesitamos revisar. De un archivo de Ann Maest
PozoPiscinaDatos_RAP	6. DRAFT. Sumaria del Campo de Pozos, RAP WoodyClyde. De archivo de Ann Maest

Figure 2 - Selva Viva Database Queries



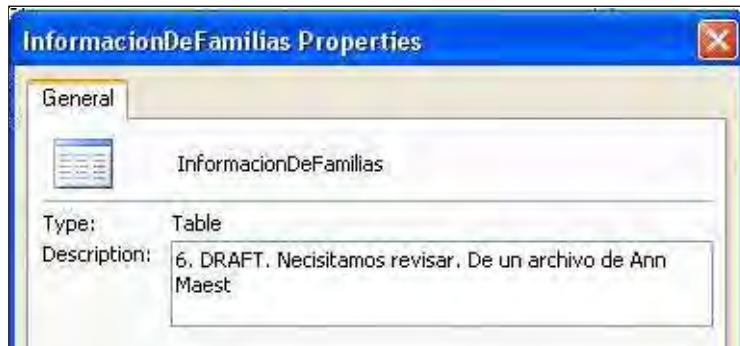
The screenshot shows the Microsoft Access 2000 interface with the title bar "BaseDeDatos 20 Junio 2007 : Database (Access 2000 file format)". The left pane displays a tree view of objects: Tables, Queries, Forms, Reports, Pages, Macros, and Modules. The "Queries" node is selected. The main pane lists 14 queries with their descriptions:

Name	Description
SelvaViva_Resultados_Agua	1a. SelvaViva - Resultados aguas
SelvaViva_Resultados_Crudo	1b. SelvaViva - Resultados crudos
SelvaViva_Resultados_Suelo	1c. SelvaViva - Resultados suelos
SelvaViva_Resultados_Todos	2a. SelvaViva - Resultados todos (sin unidades)
ParametroUnidades_Resumen	2b. SelvaViva - Unidades por resultados todos
SelvaViva_Resumen_Muestras	3a. SelvaViva - Resumen de muestras tomadas
SelvaViva_Resumen_Analises	3b. SelvaViva - Resumen de los análisis realizado
SelvaViva_Resumen_TipoDeAnalises	3c. SelvaViva - Resumen de los tipos de análisis realizado
SelvaViva_ExcesosDeAgua	4a. SelvaViva - Resultados en excesos de límites de agua
SelvaViva_ExcesosDeAguaEcuadorian	4b. SelvaViva - Resultados en excesos de límites de agua Ecuadoriano
SelvaViva_ExcesosDeSuelo	4c. SelvaViva - Resultados en excesos de límites de suelo
TPHSum_Borrador	99. Calculos de TPH total. Analisis de TPH-total o (TPH-DRO + TPH-GRO)
Resultados_Crosstab	99. Calculos para otro consulta
ResultadosFlags_Crosstab	99. Calculos para otro consulta

Figure 3 - Selva Viva Database Form - "Menu"

3.1.1 MATCHING DATA CHARACTERISTICS

I was asked to determine whether there were any data in the Selva Viva Database that were the source of provided PDFs or data from the Cabrera February 2009 Filing. I performed a number of comparisons and found that the Selva Viva Database Table labeled, “InformacionDeFamilia_20100421” (hereafter the “Familia Table”) was virtually identical to the spreadsheet found in Anexo 4 to the “Escrito R Cabrera 02-05-2009 - 09h10 - Surveys Documents.pdf” (hereafter the “Anexo 4 Spreadsheet”). The Familia Table properties indicated that it was a file of Ann Maest, as seen in Figure 4.

Figure 4 - Properties and Author of the Familia Table

After observing that some columns were simply in a different order, the near-identical nature of the two files was immediately apparent based on a visual comparison, as shown in Tables 1 and 2. The similarity of the two files was even more striking when I examined the details of the file layouts, column headings, and cell contents.

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Table 1 - Excerpt from InformacionDeFamilia Table

NOMBRE	APELLIDO	XCOORD	YCOORD	CAMPO	POZOQUEAFE	OTROSPOTOS	N-MERODEAD	N-MERODENI	N-MEROANI
Carmen	Mera	289841.000000	9921772.000000	Auca	12.000000	0	2.000000	1.000000	0.000000
Yolanda	Fajardo	289874.000000	9922356.000000	Auca	12.000000	1 auca 30	2.000000	1.000000	0.000000
Leonel	Corea	289748.000000	9922278.000000	Auca	12.000000	0	6.000000	1.000000	0.000000
Jose	Mashumar	290055.000000	9922036.000000	Auca	12.000000	1 auca 35	2.000000	3.000000	0.000000
Manuel	Quezada	289876.000000	9921278.000000	Auca	13.000000	0	4.000000	2.000000	0.000000
Carlos	Quezada	289954.000000	9920938.000000	Auca	13.000000	0	2.000000	4.000000	0.000000
Arturo	Coles	289866.000000	9920862.000000	Auca	13.000000	0	7.000000	1.000000	0.000000
Pablo	Quezada	289843.000000	9919908.000000	Auca	14.000000	0	3.000000	1.000000	0.000000
Angel	Grefa	289916.000000	9919892.000000	Auca	14.000000	0	3.000000	1.000000	0.000000
Marlene	Encarnacion	290094.000000	9919222.000000	Auca	14.000000	0	2.000000	2.000000	0.000000
Francisco	Encarnacion	289922.000000	9919270.000000	Auca	14.000000	0	2.000000	1.000000	0.000000
Cleofe	Herrera	289868.000000	9919272.000000	Auca	14.000000	0	6.000000	4.000000	0.000000

Table 2 - Excerpt from Anexo 4 Spreadsheet - page 13

CAMPO	POZO QUE LE AFECTA	OTROS POZOS	APELLIDO	NOMBRE	# ADULTOS EN CASA	# NIÑOS	# ANCIANOS
Auca	12		Mera	Carmen	2	1	0
Auca	12	1 auca 30	Fajardo	Yolanda	2	1	0
Auca	12		Corea	Leonel	6	1	0
Auca	12	1 auca 35	Mashumar	Jose	2	3	0
Auca	13		Quezada	Manuel	4	2	0
Auca	13		Quezada	Carlos	2	4	0
Auca	13		Coles	Arturo	7	1	0
Auca	14		Quezada	Pablo	3	1	0
Auca	14		Grefa	Angel	3	1	0
Auca	14		Encarnacion	Marlene	2	2	0
Auca	14		Encarnacion	Francisco	2	1	0
Auca	14		Herrera	Cleofe	6	4	0

Matching File Layout - The Familia Table had 1017 rows and 42 columns, for a total of 42,714 cells. At first glance, the Anexo 4 Spreadsheet appeared substantially smaller, but this was only because the printout contained a right-hand page break and “wrapped” the data at two different points over 57 pages. Accounting for this page break and placing the Anexo 4 Spreadsheet data side-by-side revealed that the spreadsheet contained one extra row at the end, either blank or filled with zeroes, and six less columns than the Familia Table. Therefore, in terms of actual content, the Anexo 4 Spreadsheet consisted of the same 1017 rows and 36 of the 42 columns described above, for a total of 36,612 cells. This significant overlap indicated to me that the Anexo 4 Spreadsheet was a subset of the Familia Table and was likely copied from the Selva Viva Database.

Matching Column Headings - The column headings of the Familia Table and the Anexo 4 Spreadsheet also indicated that they contained almost identical data. As a side-by-side comparison in Table 3 showed, the files contained similar column headings, describing the same content. Where differences appeared in the column headings, the Anexo 4 Spreadsheet simply provided a more complete or reader-friendly description of the same content (e.g. “Pozo Que Le Afecta” vs. “POZOQUEAFE”) or the columns were not present in the Anexo 4 Spreadsheet. For example, the “ID” field was not present in the Anexo 4 Spreadsheet. The “ID” field is a common database column used to “count” the number of records in a database.

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Table 3 - Familia Table v. Anexo 4 Spreadsheet - Column Headings

#	Familia Table	Anexo 4 Spreadsheet
1	ID	
2	Timestamp	Hora Entrevista
3	Nombre	Nombre
4	Apellido	Apellido
5	Xcoord	Xcoord
6	Ycoord	Ycoord
7	Campo	Campo
8	Pozoqueafe	Pozo Que Le Afecta
9	Otrospozos	Otros Pozos
10	Nmerodead	# Adultos En Casa
11	Nmerodení	# Niños
12	Nmeroanci	# Ancianos
13	Estafecta	Está Afectado
14	Añosdeperm	Años De Permanencia
15	Vivyaantes	Vivá Antes Aquí
16	Quópozo	Pozo Cercano
17	Tiempodepe	
18	Caracterys	
19	NiOsafect	Niños Afectados
20	Adultosafe	Adultos Afectados
21	Ancianosaf	Ancianos Afectados
22	Hamuertoal	Muertes En La Familia
23	Muertes	
24	Gastosmudi	\$ Gastos Médicos
25	Animalesmu	Animales Muertos
26	Vacas	Vacas
27	Abortosvac	Abortosvac
28	Caballos	Caballos
29	Gallinas	Gallinas
30	Hanmuertoa	Hanmuertoa
31	Extensiond	Extensión
32	Estimacion	Estimación
33	Distanciaa	Distancia A Foco Contaminación (M)
34	Hahechoalg	Ha Hecho Algo
35	Tuvoalg(nr	Tuvoalguna Respuesta
36	CuBntopien	Cuánto Piensa Indemnización Por Muerte
37	Localidad	Licalidad
38	Observacio	Observació
39	Clasedetec	Clase De Techo Su Casa
40	Techom2	Area De Techo
41	X	
42	Y	

Matching Cell Contents – In addition, the contents of the Familia Table and the Anexo 4 Spreadsheet were identical, except as noted below. Under my direction, my staff reviewed all 36,612 cells of the Anexo 4 Spreadsheet and could find no instances within the Familia Table where the contents differed in substance. Put differently, all 36,612 cells in the Anexo 4 Spreadsheet had the same content as the corresponding cells in the Familia Table. Any perceived difference only related to truncated numbers and other formatting variations, and not to the content of any cell. For example, numbers in the Anexo 4 Spreadsheet had no

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decimal point, and the Familia Table numbers all had a decimal point followed by six digits, but the integers in both data sets all matched. See Tables 4 and 5. In my experience I would only expect to see this level of matching data in situations where someone had copied a large amount of information from one data set to another.

Table 4 - Excerpt Showing Formatting of Familia Table

CAMPO	POZOQUEAFE	N-MERODEAD	N-MERODENI	N-MEROANCI
Shushufindi	45.200000	3.000000	1.000000	0.000000
Shushufindi	45.200000	4.000000	8.000000	0.000000
Shushufindi	45.100000	3.000000	4.000000	0.000000
Shushufindi	47.000000	1.000000	0.000000	0.000000
Shushufindi	45.200000	5.000000	4.000000	0.000000
Shushufindi	45.100000	3.000000	3.000000	0.000000
Shushufindi	45.200000	2.000000	4.000000	0.000000
Shushufindi	5.000000	2.000000	3.000000	1.000000

Table 5 - Excerpt Showing Formatting of Anexo 4 Spreadsheet

CAMPO	POZO QUE LE AFECTA	# ADULTOS EN CASA	# NIÑOS	# ANCIANOS
Shushufindi	45	3	1	0
Shushufindi	45	4	5	0
Shushufindi	45	3	4	0
Shushufindi	47	1	0	0
Shushufindi	45	5	4	0
Shushufindi	45	3	3	0
Shushufindi	45	2	4	0
Shushufindi	5	2	3	1

Matching Timestamps – Among the data that matched across the Familia Table and Anexo 4 Spreadsheet, all 1,017 timestamp entries were the same down to the second. On the Familia Table, this content appeared under the “Timestamp” column, and on the Anexo 4 Spreadsheet it appeared under the “Hora Entrevista” column. This matching data further indicated that the Anexo 4 Spreadsheet was copied from the Familia Table because such precise timestamping would be a common, computer-derived function of entering data into a database rather than a person manually entering dates and times into a spreadsheet.

Matching Cell Anomalies – Most importantly, I found anomalies such as misspellings or unique abbreviations, punctuation, or use/lack of spacing that were repeated across both data sets. For example, the location known as “Dayuma” was misspelled and appeared on both the Familia Table and the Anexo 4 Spreadsheet as “Dayumma.” Other examples of these matching anomalies appear in Table 6. The fact that such unique errors or attributes appeared in both data sets further confirms my opinion that the Anexo 4 Spreadsheet likely had been copied from the Familia Table.

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Table 6 - Matching Anomalies in Familia Table and the Anexo 4 Spreadsheet

Page	Line	Column	Familia Table	Anexo 4 Spreadsheet	"Should Be"
3	155	5	Raúl	Raúl	Raúl
4	207	5	Raúl	Raúl	Raúl
4	212	5	Raúl	Raúl	Raúl
11	637	5	Raúl	Raúl	Raúl
13	726	5	Raúl	Raúl	Raúl
4	226	3	2 pozos auca 24,y auca 41	2 pozos auca 24,y auca 41	2 pozos auca 24, y auca 41
5	270	5	Jesús	Jesús	Jesús
8	397	5	Jesús	Jesús	Jesús
8	409	3	Atacapi 3,	Atacapi 3,	Atacapi 3
9	427	12	Valle hermosw	Valle hermosw	Valle hermosa
9	486	3	1 conunaco 9	1 conunaco 9	1 cononaco 9
10	569	12	Conga1y2	Conga1y2	Conga 1 y 2
13	719	3	Sacha central	Sacha central	Sacha Central
13	736	3	Sacha central	Sacha central	Sacha Central
13	746	3	Sacha central	Sacha central	Sacha Central
16	869	3	Sacha 35 33 119 12	Sacha 35 33 119 12	Sacha 35, 33, 119, 12
39	11	1	Shushufindi estacion Sur oeste	Shushufindi estacion Sur oeste	Shushufindi estacion sur oeste
46 / 47	448	4	Dolor de huesos, cabeza, estomago, garganta, granos en la piel, hongos,	Dolor de huesos, cabeza, estomago, garganta, granos en la piel, hongos,	Dolor de huesos, cabeza, estomago, garganta, granos en la piel, hongos
47	481	3	Dayumma	Dayumma	Dayuma
48	523	3	Precoop 16de abril	Precoop 16de abril	Precoop 16 de abril
56	978	3	Precooperativa Reina de oriente	Precooperativa Reina de oriente	Precooperativa Reina del oriente
56	1004	3	Barrio la Carolina	Barrio la Carolina	Barrio La Carolina

3.2. THE SENTENCIA

In this matter, I also was asked specifically to look at pages 101 – 112 in the Sentencia and compare the environmental data contained therein to the Filed Lab Results in the official court record and to the Unfiled Unfiled Selva Viva Data Compilation. In addition, I was asked to look at page 125 in the Sentencia and compare the number of pits identified (880) within the Stratus Compilation. The Stratus Compilation is a collection of pit information.

My review of the data in the Filed Lab Results showed that they were similar in many ways to the Unfiled Selva Viva Data Compilation; however, several notable differences revealed that the Unfiled Selva Viva Data Compilation was likely the source of the information cited within the Sentencia, and therefore the Sentencia was not authored independent of the Unfiled Selva Viva Data Compilation. I also found that reliance on the Unfiled Selva Viva Data Compilation introduced several numerical errors into the Sentencia. These differences are described below.

My review of Anexo H-1 from the Cabrera Report and the Stratus Compilation revealed that the pit count of 880 stated in the Sentencia was likely derived from the Stratus Compilation or the Anexo H-1 document for the reasons set forth below.

3.2.1 NAMING IRREGULARITIES

SV TX Suffix - Many of the sampling results set forth in the Sentencia on pages 104-112 end with the suffix “_sv” or “_tx”. However, a review of the Judicial Inspection Reports and Filed Lab Results provided to me failed to show a single sample result referenced in this manner. In contrast, a review of the data within the Unfiled Selva Viva Data Compilation showed that a majority of the sampling results referenced in the reviewed portion of the Sentencia contained these “_sv” or “_tx” suffixes. Figures 5 and 6 show examples of data in the Filed Lab Results and the Unfiled Selva Viva Data Compilation, respectively. Figure 7 shows a list of sampling results extracted from the Sentencia where the names match the Unfiled Selva Viva Data Compilation but do not match any of the Filed Lab Results.

Figure 5 Sample Name as set forth in Filed Lab Results

PUNTO DE MUESTREO	Código HAVOC	HAPs mg/kg	TPH mg/kg
MÉTODO DE REFERENCIA		EPA 8100	EPA 418.1
SSF4-PIT1-SD1-SU1-R(1.3 a 1.6)	S050801	2.59430	>900000

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Figure 6 - Sample Name from the Unfiled Selva Viva Data Compilation

Muestra	Parametro	Metodo	Resultado	Unidad
SSF4-PIT1-SD1-SU1-R(1.3-1.6)_sv	TPH	EPA 418,1	900000	mg/Kg

Figure 7 - Sampling Results from the Sentencia with _sv or _tx Suffixes

AU01-A1-SD1-SU1-R(60-100cm) sv	LAN-ESTB-ASUE2 sv	SSF08-PIT1-S3 sv
AU01-PIT1-SD2-SU2-R (220-240cm) sv	LAN-ESTB-D1 sv	SSF08-PIT2-S11 sv,
CON6-A2-SE1 sv	LAN-ESTB-D2 sv	SSF08-PIT2-S3 SV
CON6-PIT1-SD1-DU1-R(160-260cm) sv	LAN-ESTB-E1 sv	SSF08-PIT2-S4-1 sv
EAG-A2-SE1 sv	LAN-ESTB-H2 sv	SSF08-PIT2-S5 sv
ESN2-PIT2-SE1_sv	SA13-SE1(1.0-1.5m)_sv	SSF08-PIT2-S6_sv
ESN2-PIT3-SE2 sv	SA13-SW3(1.0-1.4m) sv	SSF13-JI-SB1-1.6M tx
GTA07-A1-SD1-SUI-R(20-60cm) sv	SA14-AS sv	SSF13-PIT3-SD2-SU1-R(0.2-1.0) sv
GTA07-PIT2-SE1 sv	SA14-P3 (0.10-0.80m) sv	SSF13-PY0-SD1-SU1-R(2.1-2.3) sv
LA02-PIT1-SD1-SU1-R (0.4-0.8m) sv	SA18-NE1-1 sv	SSF18-A1-SU1-R(0.0m) sv
LA06-PIT1-SD1-R(1.4-1.9m) sv	SA18-NW6-A2 sv	SSF18-A1-SU2-R(0.0m) sv
LA09-PIT2-SD1-SU1-R(1.8-2.8m) sv	SA18-SE3 sv	SSF18-PIT2-SD1-SU1-R(1.5-2.0m) sv
LA15-PIT1-SD1-SU1-R(1.8-2.2m) sv	SA51-NE2(1.25-1.77m) sv	SSF45A-A1-SE2 sv
LA15-PIT1-SD2-SU1-R(1.8-2.2m) sv	SAC-EST-S1 sv	SSF4-PIT1-SD1-SU1-R(1.3-1.6) sv
LA15-PIT2-SD2-SU1-R(1.4-1.8m) sv	SAC-PIT1-S1-1 sv	SSF4-PIT3-SD1-SU1-R(0.0 a 0.4) sv
LAC-PIT1-SD1-SU1-R (1.6-2.4m) sv	SAC-PIT1-S1-2 sv	SSF4-PIT5-SD1-SU1-R(1.2-1.6) sv
LAN-ESTA-B sv	SAC-PIT2-S1 sv	SSF4-PIT5-SD2-SU2-R(1.6-3.3) sv
LAN-ESTA-B1 sv	SSF07-A2-SD1-SU1-R(1.3-1.9) sv	SSF-SUR-C1-TW(0.60-0.80m) sv
LAN-ESTA-B2 sv	SSF08-PIT1-S1 sv	SSF-SW-PNT-SCIIB sv
LAN-ESTA-C sv	SSF08-PIT1-S2 sv	YU2B-A1-SE1 sv
LAN-ESTB-ASUE1_sv		

Parentheses Placement - Further review of the sampling results listed in the Sentencia showed another naming convention used in the Unfiled Selva Viva Data Compilation but not in the Filed Lab Results. Both the Sentencia and the Unfiled Selva Viva Data Compilation used a naming convention that ended with numeric ranges and an "m" or "cm" enclosed within parentheses. In contrast the Lab Reports in the court record used a naming convention that ended with numeric ranges in parentheses, followed by an "m" or "cm" outside of the parentheses. Figures 8 and 9 show data for the same inspection location from the Filed Lab Results and the Unfiled Selva Viva Data Compilation. Figure 10 shows a comparison of the affected names across these data sources and the Sentencia.

Figure 8 - Sample Name as set forth in Filed Lab Results

INFORMACIÓN CODIGO CLIENTE
MÉTODO
AU01-PIT2-SD1-SU1-R(130-180) cm
AU01-PIT1-SD2-SU1-R(100-150) cm
AU01-A1-SD1-SU1-R(60-100) cm
AU01-A2-SD1-SU1-R(3.0-3.2) m
AU01-PIT1-SD1-SU1-R(150-210) cm
AU01-PIT1-SD2-SU2-R(220-240) cm

Figure 9 - Sample Name from the Unfiled Selva Viva Data Compilation

Muestra	Parametro	Metodo	Resultado	Unidad
AU01-PIT1-SD2-SU2-R(220-240cm)_sv	TPH	EPA 418.1	22842.4	mg/Kg

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Figure 10 - Sampling Results from the Sentencia with Misplaced Units

Sentencia	Selva Viva Data Compilation	Lab Results
AU01-A1-SD1-SU1-R(60-100cm)_sv	AU01-A1-SD1-SU1-R(60-100cm)_sv	AU01-A1-SD1-SU1-R(60-100) cm
AU01-PIT1-SD2-SU2-R(220-240 cm)_sv	AU01-PIT1-SD2-SU2-R(220-240cm)_sv	AU01-PIT1-SD2-SU2-R(220-240) cm
CON6-PIT1-SD1-DU1-R(160-260cm)_sv	CON6-PIT1-SD1-SU1-R(160-260cm)_sv	CON6-PIT1-SD1-SU1-R(160-260) cm
GTA07-A1-SD1-SU1-R(20-60cm)_sv	GTA07-A1-SD1-SU1-R(20-60cm)_sv	GTA07-A1-SD1-SU1-R (20-60)cm
LA02-PIT1-SD1-SU1-R (0,4-0,8m)_sv	LA02-PIT1-SD1-SU1-R(0,4-0,8m)_sv	LA02-PIT1-SD1-SU1-r(0.4-0.8)m
LA06-PIT1-SD1-R(1.4-1.9m)_sv	LA06-PIT1-SD1-R(1.4-1.9m).sv	LA06-PIT1SD1-R(1.4-1.9)m
LA06-PIT2-SD1-SU1-R(1.8-2.8m)_sv	LA06-PIT2-SD1-SU1-R(1.8-2.8m)_sv	LA06-PIT2-SD1-SU1-R(1.8-2.8)m
LAC-PIT1-SD1-SU1-R (1.6-2.4m)_sv	LAC-PIT1-SD1-SU1-R(1.6-2.4m)_sv	LAC-PIT1-SD1-SU1-R(1.6-2.4)m
SA13-SE1(1.0-1.5m)_sv	SA13-SE1(1.0-1.5m)_sv	SA13-SE1(1,0-1,5)m
SA13-SW3(1.0-1.4m)_sv	SA13-SW3(1.0-1.4m)_sv	SA13-SW3(1,0-1,4)m

Underscore Separators - In addition, I found another example in the Sentencia that showed its reliance on the Unfiled Selva Viva Data Compilation. When talking about benzene results on page 108, the Sentencia referred to sample result "SA_13_JI_AM1_0.1M". This name contained underscores between various parts of its title, and this naming format matched that used in the Unfiled Selva Viva Data Compilation. In contrast, the Filed Lab Results contained no such underscores. Instead, data for the SA13 sample clearly showed dashes used as separators within the title of the sample result. Figures 11 and 12 show the data for this sample in the Filed Lab Results and the Unfiled Selva Viva Data Compilation, respectively.

Figure 11 - Sample Name as set forth in Filed Lab Results

AREA DE MUESTREO		AREA DEL DERRAME	Criterios Internacionales
PUNTO DE MUESTREO		SA-13-JI-AM1	
FECHA DE MUESTREO:		10/11/04	
PROFUNDIDAD DE MUESTREO:		0,10	
INTERVALO DE MUESTREO		0,0 - 0,10 m	
ANALITO	CAS No.		

BTEX (Método 8260B de la USEPA SW-846)					
Benceno	71-43-2	17	8		
Etilbenceno	100-41-4	60	400		
Tolueno	108-88-3	97	650		
Xilenos (totales)	1330-20-7	220	410		

Figure 12 - Sample Name from the Unfiled Selva Viva Data Compilation

Muestra	Fuente de datos	Matriz	Parametro	Resultado	Unidad
ISA 13 JI AM1 0.1M	Texaco	Suelo	Benceno	17	mg/kg

Incorrectly Identified Expert – Finally, page 108 of the Sentencia stated, “Chevron’s expert, John Connor, submitted results showing 9.9 and 2.3 mg/Kg (see samples JL-LAC-PIT1-SD2-SU1.R (1.30-1.90) M y JI-LAC-PIT1-SD1-SU1-R (1.6-2.4)M) during the judicial inspection in Lago Agrio Central...” (from translation). The Unfiled Selva Viva Data Compilation also showed John Connor as the examiner responsible for that test data. However, the Judicial Inspection Report filed with the court showed that Professor Fernando Morales was the one who carried out the inspection.

3.2.2 DATA IRREGULARITIES

Apart from the naming conventions described above, I also found data irregularities in the Unfiled Selva Viva Data Compilation that were replicated within the Sentencia. These irregularities mean that certain statements made in the Sentencia were based on erroneous information from the Unfiled Selva Viva Data Compilation.

Non-Detects – Based on data that I have reviewed in this case, I am aware that some environmental sampling procedures have a detection limit based on the equipment, the methods used in the sampling

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procedure, and/or the substance being tested. Samples under a detection limit are often referred to as a "non-detect," and when a non-detect is recorded, it is often shown as a less-than sign ("<") followed by a number that represents the minimum concentration of a substance that can be detected by the applied test or sampling method. In this case, the Filed Lab Results showed that the concentration of mercury for various inspection sites were recorded as non-detects, and expressed as "<7". The Sentencia, however, dropped the "<" and failed to acknowledge that the level of mercury fell below detectable levels for several sites. Instead, the court stated in its decision that, "alarming levels of mercury have been found..." with "several samples reaching 7mg/Kg" of mercury. However, the evidence again revealed that the court likely relied on and subsequently misinterpreted the Unfiled Selva Viva Data Compilation, rather than relying on the Filed Lab Results submitted with the Judicial Inspection Reports. The Unfiled Selva Viva Data Compilation placed the "<" in a separate column, as described in the email thread dated March 4, 2008 and found in the SN 049997-SN 050000.pdf. The Unfiled Selva Viva Data Compilation listed the "7" in its own column, and the court appeared to have misinterpreted this as the actual concentration of mercury for various sites. In doing so, the Sentencia eliminated any non-detect results and made mercury levels appear higher and more certain than the actual filed results. The Sentencia appeared to make the same mistake with respect to concentrations of benzene and toluene at other sites. Figures 13 and 14 show an example of the Filed Lab Results versus the spreadsheets from the Unfiled Selva Viva Data Compilation. Figure 15 shows a comparison of the non-detects located in the Unfiled Selva Viva Data Compilation and the Filed Lab Results relative to how they appeared in the Sentencia.

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Figure 13 - Presentation of Non-Detects in Filed Lab Results

PUNTO DE MUESTREO		Mercurio mg/Kg
LAN-ESTB-E1		<7
LAN-ESTB-D1		<7
LAN-ESTB-C1		<7
LAN-PIT1-A		<7
LAN-ESTA-B2		<7
LAN-ESTA-C		<7
LAN-ESTA-B		<7

Figure 14 - Non-Detect in the Unfiled Selva Viva Data Compilation

Muestra	Parametro	Resultado	Unidad	Flag
LAN-ESTB-E1_SV	Mercurio	7 mg/Kg		<

Figure 15 - Comparison of Non-Detects across Data Sources

Sample Name	Substance	Value (mg/kg)		
		Sentencia	Selva Viva Data Compilation	Lab Results
LAN-ESTA-B	Mercury	7	7	< 7
LAN-ESTA-B1	Mercury	7	7	< 7
LAN-ESTA-B2	Mercury	7	7	< 7
LAN-ESTA-C	Mercury	7	7	< 7
LAN-ESTB-ASUE1	Mercury	7	7	< 7
LAN-ESTB-ASUE2	Mercury	7	7	< 7
LAN-ESTB-D1	Mercury	7	7	< 7
LAN-ESTB-D2	Mercury	7	7	< 7
LAN-ESTB-E1	Mercury	7	7	< 7
SA51-NE2(1.25-1.77m)	Benzene	1	1	< 1
SA51-NE2(1.25-1.77m)	Toluene	1	1	< 1
SAC-EST-S1	Mercury	7	7	< 7
SAC-PIT1-S1-1	Mercury	7	7	< 7
SAC-PIT1-S1-2	Mercury	7	7	< 7
SSF08-PIT1-S1	Mercury	7	7	< 7
SSF08-PIT1-S2	Mercury	7	7	< 7
SSF08-PIT1-S3	Mercury	7	7	< 7
SSF08-PIT2-S11	Mercury	7	7	< 7
SSF08-PIT2-S3	Mercury	7	7	< 7
SSF08-PIT2-S4-1	Mercury	7	7	< 7
SSF08-PIT2-S5	Mercury	7	7	< 7
SSF08-PIT2-S6	Mercury	7	7	< 7
SSF-SW-PNT-SCI1lb	Benzene	5	5	< 5
SSF-SW-PNT-SCI1lb	Toluene	5	5	< 5

Milligram (mg) vs. Microgram (µg) – While comparing data points, I observed instances where concentrations of substances at specific sites were listed in both the Sentencia and the Unfiled Selva Viva Data Compilation as milligrams per kilogram (mg/Kg). However, the Filed Lab Results indicated that concentrations for those same substances and sites should be listed as micrograms per kilogram (µg/Kg) – a thousand times less concentrated than the levels reported in the Sentencia. Again, the Unfiled Selva Viva

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Data Compilation appeared to be the source of erroneous information cited. Figures 16 and 17 show examples of the Filed Lab Results and corresponding data from the Unfiled Selva Viva Data Compilation. Figure 18 shows a comparison of the concentrations referenced in the Sentencia and data for those sites reflected in the Filed Lab Results and the Unfiled Selva Viva Data Compilation, respectively.

Figure 16 - Microgram (μg) from the Filed Lab Results

INFORMACIÓN CODIGO CLIENTE	Código HAVOC	HAPs $\mu\text{g}/\text{kg}$
METODO	-----	EPA8310/3545
AU01-PIT2-SD1-SU1-R(130-180) cm	S061111	-----
AU01-PIT1-SD2-SU1-R(100-150) cm	S061112	-----
AU01-A1-SD1-SU1-R(60-100) cm	S061113	466

Figure 17 - Milligram (mg) from the Unfiled Selva Viva Data Compilation

Muestra	Parametro	Metodo	Resultado	Unidad
AU01-A1-SD1-SU1-R(60-100cm)_sv	HAPs	EPA 8310/3545	466	mg/Kg

Figure 18 - Sampling Results from all Data Sources with Misstated Units

Sample Name	Substance	Reported Units			Lab Results
		Sentencia	Selva Viva Data Compilation		
AU01-A1-SD1-SU1-R(60-100cm)	HAPs	mg/kg	mg/kg		$\mu\text{g}/\text{kg}$
AU01-PIT1-SD2-SU2-R(220-240cm)	HAPs	mg/kg	mg/kg		$\mu\text{g}/\text{kg}$
CON6-A2-SE1	HAPs	mg/kg	mg/kg		$\mu\text{g}/\text{kg}$
CON6-PIT1-SD1-SU1-R(160-260cm)	HAPs	mg/kg	mg/kg		$\mu\text{g}/\text{kg}$

3.2.3 NUMERICAL ERRORS

Finally, I observed several numerical errors in the Sentencia related to test results, percentages, and pit counts that further showed a reliance on documents not filed with the court – namely the Unfiled Selva Viva Data Compilation and the Stratus Compilation.

Chevron TPH Results - On page 102 of the Sentencia, the author referred to 1,984 TPH test results, "... brought by the defendants' experts ..." Based on my review of The Connor Report and Anexo B to the Cabrera Report, this number appeared to be too high. Those reports indicate that between 932 and 964 soil samples were taken by Chevron. My examination of the Unfiled Selva Viva Data Compilation confirmed that 1,984 was inaccurate and based on the Unfiled Selva Viva Data Compilation and not documents filed with the court. I performed this examination by sorting the Unfiled Selva Viva Data Compilation by the following columns and unique entries: "Fuente de datos" (Texaco); "Matriz" (Suelo), and "Parametro" ("Begins with" TPH). This sorting had the effect of limiting results to soil samples attributed to Chevron and analyzed for TPH. When I did this sorting, I found that the count of all Chevron's TPH test results in the Unfiled Selva Viva Data Compilation equaled the number cited in the Sentencia -- 1,984. The 1,984 number was inconsistent with the court record because when I counted just the TPH results from the Filed Lab Results in the record, I arrived at a number (935) that was approximately half that of the number cited in the Sentencia and generally consistent with the counts given in The Connor Report (932) and Anexo B to the Cabrera Report (964). To reach 1,984 TPH results for Chevron, it was necessary to count the Diesel Range Organics (DRO) and the Gasoline Range Organics (GRO) readings for the same sample as separate TPH results. See example, Figure 19. However, this was not what the Sentencia purported to do. Rather it stated that DRO and GRO readings "...have to be added up to in order to have a relatively comparable equivalence with TPHs." Based on this analysis, I concluded that the likely reason the

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Sentencia effectively double counted most of Chevron's TPH results was its author's reliance on the Unfiled Selva Viva Data Compilation.

Figure 19 - Defendant's data as set forth in the Unfiled Selva Viva Data Compilation

Muestra	Fuente de datos	Matriz	Parametro	Resultado	Unidad
JI-CO-06-SB3-0,3M	Texaco	Suelo	TPH-DRO	3	mg/Kg
JI-CO-06-SB3-0,3M	Texaco	Suelo	TPH-GRO	0.26	mg/Kg

Lago Agrio Plaintiff TPH Results - In addition to the erroneous reporting of 1,984 Chevron TPH results described above, the Sentencia inaccurately counted the Lago Agrio Plaintiffs' TPH results, again based on its apparent reliance on the Unfiled Selva Viva Data Compilation. When discussing TPH levels, the Sentencia stated in part, "...The plaintiffs' expert have submitted 420 results..." for TPH soil samples; however, I again found that this number was overstated. As a preliminary matter The Connor Report and Anexo B to the Cabrera Report indicate that between 308 and 339 soil samples were taken by plaintiffs. To perform my analysis I reviewed entries associated with the plaintiffs' data in the Unfiled Selva Viva Data Compilation. I sorted the data first on the column and unique item labeled "Fuente de datos" (Demandantes), then on "Matriz" (Suelo), and finally "Parametro" ("Begins with" TPH). This sorting had the effect of limiting results to soil samples attributed to the Lago Agrio Plaintiffs and analyzed for TPH. This yielded 420 results, thereby showing a match between the Unfiled Selva Viva Data Compilation and the Sentencia. Once again, there were many instances where DRO and GRO tests were counted as individual results rather than combined to represent one TPH value. Further distorting plaintiffs' numbers in the Sentencia, some test sites in the Unfiled Selva Viva Data Compilation listed both the DRO and GRO individual tests, as well as a separate TPH value that combined these two tests. Figure 20 shows an example of this data extracted from the Unfiled Selva Viva Data Compilation. Based on this analysis, I conclude that reliance on the Unfiled Selva Viva Data Compilation resulted in a substantial over counting of the plaintiffs' test results within the Sentencia.

Figure 20 - Plaintiffs' data as set forth in the Unfiled Selva Viva Data Compilation

Muestra	Fuente de datos	Matriz	Parametro	Resultado	Unidad
SA51-N2(1.70-2.25m)_sv	Demandantes	Suelo	TPH	1445	mg/Kg
SA51-N2(1.70-2.25m)_sv	Demandantes	Suelo	TPH-DRO	685	mg/Kg
SA51-N2(1.70-2.25m)_sv	Demandantes	Suelo	TPH-GRO	760	mg/Kg

Computed Percentages - The erroneous TPH counts in the Sentencia had the additional effect of distorting the sample percentages listed in the decision. I was able to use the "DA00000040.xls" spreadsheet containing the Unfiled Selva Viva Data Compilation to reproduce the percentages listed in the Sentencia. I did so by simply sorting the Unfiled Selva Viva Data Compilation spreadsheet to represent the three groups of "Texaco", "Demandantes", and "Corte," and then dividing the sums in each of these columns by the inaccurate TPH counts. The percentages listed in the Sentencia along with the percentages computed using the Unfiled Selva Viva Data Compilation are shown in Figure 21. The percentages are almost identical, and any slight differences between the Sentencia and Unfiled Selva Viva Data Compilation appear to be due to variances in decimal rounding.

Figure 21 - Sample Statistics in Sentencia vs. Unfiled Selva Viva Data Compilation

Description	% in Sentencia	% in Compilation
TPH > 5,000	10.0%	10.2%
TPH 1,000 - 5,000	10.3%	10.1%
TPH < 1,000	79.7%	79.7%
Texaco % of Total	80.4%	80.5%
Texaco <1,000	88.2%	88.2%
Plaintiff % Total	17.0%	17.0%
Plaintiff <1,000	38.0%	38.1%
Plaintiff >1,000	62.0%	61.9%
Texaco <1,000 % of All Samples	70.9%	71.0%
Texaco <1,000 % of Results <1,000	89.0%	89.1%

Pit Counts - On page 125 of the Sentencia, the author referred to 880 pits, (proven through aerial photographs certified by the Geographic Military Institute which appear throughout the record, analyzed together with the official documents of Petroecuador submitted by the parties and especially by the expert Gerardo Barros. "... a figure that is arrived at considering that we have 880 pits..." My examination revealed that this number was likely based on the Stratus Compilation or Anexo H-1. I observed that the Stratus Compilation contained almost the exact same data in the exact same format as the information in the Anexo H-1 document filed earlier with the Cabrera Report. In particular the Anexo H-1 document lists 916 pits. The Stratus Compilation had 917 records or rows (pits). This single difference in pits between Anexo H-1 and the Stratus Compilation appears to be an absence of the Charapa 4 pit record from the Anexo H-1 document. While it may appear at first glance that the count of 880 pits did not derive from the Stratus Compilation/Anexo H-1, my analysis showed that it was more likely that it did. When I sorted the "COMENTARIO DEL RAP" column by removing all references to "no impact," "Petroecuador," and "Petroproduccion" as shown in Figure 22, the result was 880 records – the same number that appeared in the Sentencia. Therefore, the count of 880 was probably arrived at by simply sorting on the RAP Comment column within the Stratus Compilation, which itself contains almost the exact same data in the exact same format as Anexo H-1.

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Figure 22 - Data Counts from Stratus Compilation

Comentario Del Rap	Full Count	Revised Count
Cerrada previamente	21	21
Construida despues del 6/30/90 por Petroecuador	3	
Construida despues del 6/30/98 por Petroecuador	2	
El propietario no permitio el paso	3	3
Impact below action levels	1	
Modificada despues del 6/30/90 por Petroecuador	6	
No detectó impactos	18	
No determinada como piscina	1	
Petroecuador construyo sobre la piscina	1	
Petroproduccion usó la piscina	1	
Petropuroducción soló descagar basura	1	
Piscina cerrada	1	1
Pit was graded and revegetated	1	1
Plantacion de maíz	1	1
Remediación completa	156	156
Responsabilidad de Petroecuador	1	
Revegetada	1	1
Soil TPH below action levels	1	1
Usada como piscina para peces por la comunidad	2	2
Usada por la comunidad local	15	15
Usada por Petroecuador	1	
Used as a municipal landfill	2	2
Utilizada por Petroproducción como piscina de quema	1	
(blank)	676	676
Grand Total	917	880

4. CONCLUSIONS

Based on my analysis of the data provided by counsel, I conclude to a reasonable degree of scientific certainty that data within the Cabrera February 2009 Filing and the the Sentencia were derived from material not filed with the court in the Lago Agrio litigation in Ecuador. First, I conclude that the Familia Table from the Selva Viva Database (not filed with the court) was likely the source of the Anexo 4 Spreadsheet found within the Cabrera February 2009 Filing. Second, I conclude that the Unfiled Selva Viva Data Compilation and the Stratus Compilation were sources of numerous data points cited in the Sentencia. It is highly unlikely that the Filed Lab Results from the Judicial Inspection Reports were the source of these data points based on the numerous irregularities found in the Sentencia that did not match the Filed Lab Results but that did match data within the Unfiled Selva Viva Data Compilation. In fact, as shown by the six categories of Naming and Data Irregularities described in this report, which represent in excess of 100 specific repeated irregularities, it is reasonable to conclude that the data points cited in the Sentencia were copied, cut-and-pasted, or otherwise taken directly from the Unfiled Selva Viva Data Compilation. Also, it is highly unlikely that the TPH counts, statistical percentages, or pit counts discussed in this declaration and cited in the Sentencia were independently derived from the Filed Lab Results. Finally, I conclude that the pit count of 880 listed in the Sentencia was derived from the Stratus Compilation and/or Anexo H-1.

Respectfully submitted,

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